

Work Order ID 150299

Friday, October 21, 2016 7:56:24 AM

150299

Page 1

Item ID: **D4017-7** Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Rib
 Start Date: 8/23/2016 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 8/24/2016 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: Date **OCT 21 2016** Tooling: Date: Run Start ***NR1***
 QC: **DAS 21 9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4017	E								

100 0.00
100
 Large Fab Memo 0.00
 Large Fab 1- Cut tube as per dwg D4017
 2- Deburr and remove identify marks

12 *C* *16-10-24*

110 QC6- Inspect dimensions to drawing 0.00
110
 QC Memo 0.00
 Quality Control

12x **DAS 43 9-89** **OCT 24 2016**

120 Identify as per dwg & Stock Location: WWA 04 0.00
120
 Packaging Memo 0.02
 Packaging LOCATION: WA004

12x **DAS 43 9-89** **OCT 24 2016**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 150299

Friday, October 21, 2016 7:56:24 AM

150299

Page 2

Item ID: D4017-7

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Rib

Start Date: 8/23/2016 Start Qty: 12.00

12

Cust Item ID:

Required Date: 8/24/2016 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.20

Quality Control

10/10/24
16-10-24

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

Friday, October 21, 2016 7:56:29 AM

Page 1

Work Order ID: 150299

150299

Parent Item: D4017-7

D4017-7

Parent Item Name: Rib

Start Date: 8/23/2016

Required Date: 8/24/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP RevA: new issue DD 09.11.26 verified by:EC IPP Rev:B as
per dwg RevA DD 10.03.06 verified by:EC IPP Rev:C as per dwg RevB
DD 10.04.16 verified by:EC IPP Rev:D as per dwg revC DD 10.08.18
verified by:EC IPP Rev:E 11.01.18 chg qc5 to 6 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304TS0.750W.049

Purchased

No

100

f

934.2610

0.0675

0.852631

M304TS0 750W 049

304 SQ Tube .75x.75x.049W

Location

Loc Qty

Loc Code

WA004

934.261

M134940

38

M135226

16.261

M135711

480

M135899

400

B135226

1 **10-10-24**

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

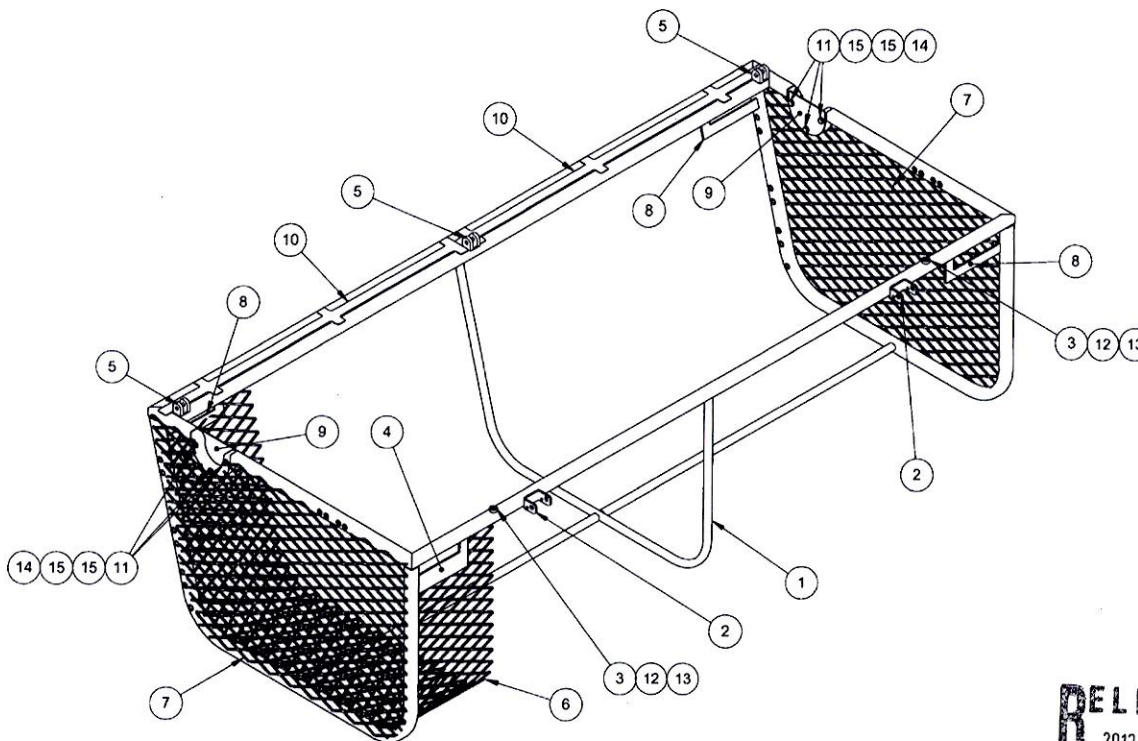


QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
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Misidentified ☐	Past Due ☐																																																														

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4017-041	SHORT BASKET ASSY (350)
1	1	D4017-101	TUBULAR ASSY (350 SHORT BASKET)
2	2	D2581	MOUNTING BRACKET
3	2	D2931	BUMPER
4	1	D3913-15	WIDE HANDLE PLATE
5	3	D4016-1	HINGE HALF, BASE
6	1	D4020-3	MESH (350 BASKET SHORT BASE)
7	2	D4020-11	END MESH, BASKET
8	3	D4021-1	HANDLE PLATE
9	2	D4021-5	BLANKING PLATE
10	2	D4672-3	BLANKING PLATE
11	6	AN3-10A	BOLT, MACHINE
12	2	AN960JD8	WASHER
13	2	MS20600AD4W3	RIVET, BLIND, PAN-HEAD
14	6	MS21042L3	NUT, SELF-LOCKING
15	12	NAS1149F0332P	WASHER



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 150299 HCS
16-08-26

D4017-041 SHORT BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

RELEASED
2013-08-16

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 28.8 lbs APPROX
- 8) INSTALL AFTER FINISH
- 9) MASK HOLES PRIOR TO POWDER COAT
- 10) WELD PER DART QSI 004

E	PICTORIAL UPDATE TO MULTIPLE VIEWS FOR CHANGES TO D4034-043. A4-4 28.13 DIM IS NOW REF.	AJS	13.07.18
D	ADD D4672-3 (ZN C5-1, D4-1, D6-1, D3-2, AND D4-2). REASON: PART 12-197.	MB	12.06.18
C	ITEM #4 NOW INSTALLED OUTBOARD (C4-1, C5-1, B5-2 AND D6-2). REASON: ELIMINATE INTERFERENCE PREVENTING INSTALLATION OF RECEIVER ASSEMBLIES.	MB	10.07.23
B	QTY 1 D4021-1 REPLACED WITH QTY 1 D3913-15; AN3-10A BOLT WAS AN3C10A; NAS1149F0332P WASHER WAS NAS1149C0332R; SECTION F-F UPDATED (D6-2); ITEMS RENUMBERED; DETAIL D UPDATED (A4-3)	JPH	10.03.25
A	NEW ISSUE	AJS	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.07.18		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4017** REV. E
TITLE **SHORT BASKET BASE ASSY (350)** SCALE NTS

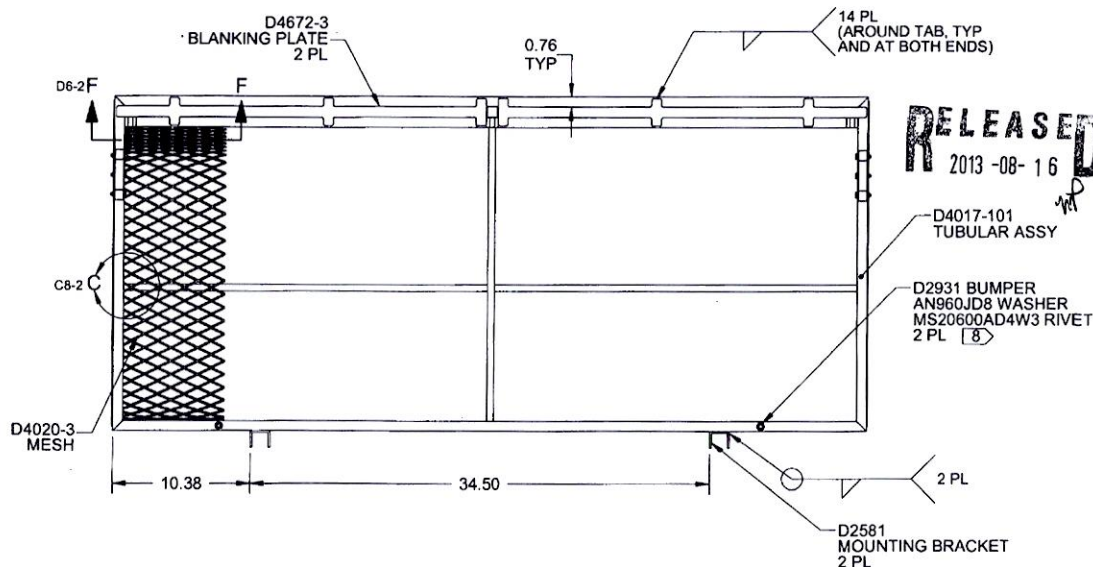
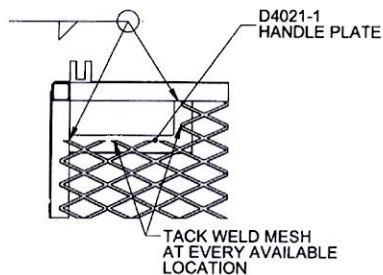
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TACK WELD MESH
AT EVERY AVAILABLE
LOCATION

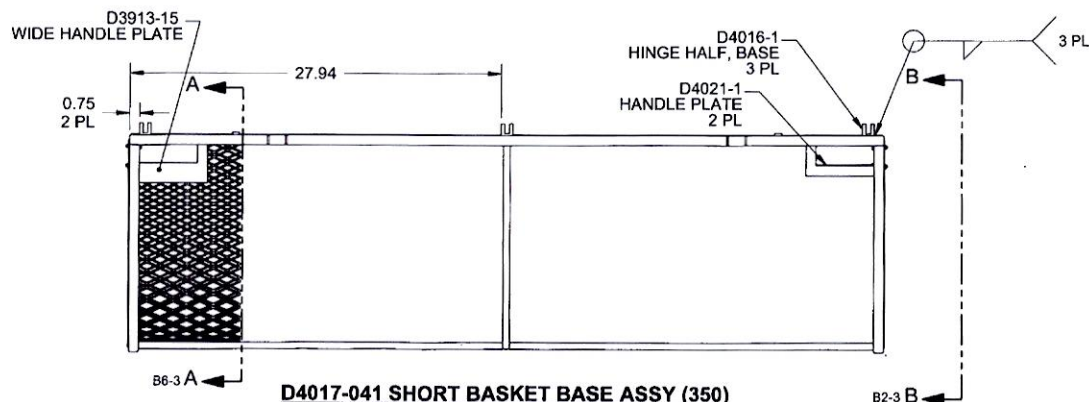
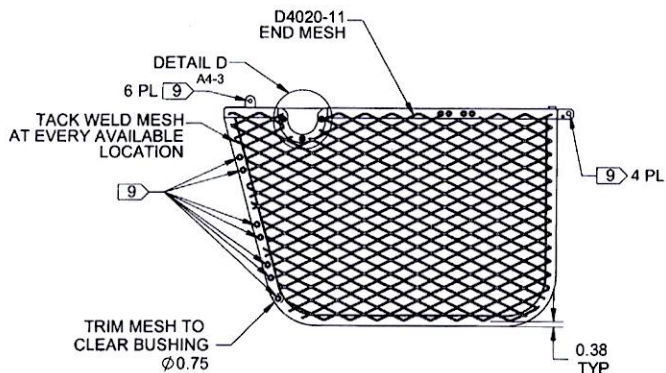


DETAIL C D5-2

SECTION F-F
TYPICAL FOR ALL
HANDLE PLATES



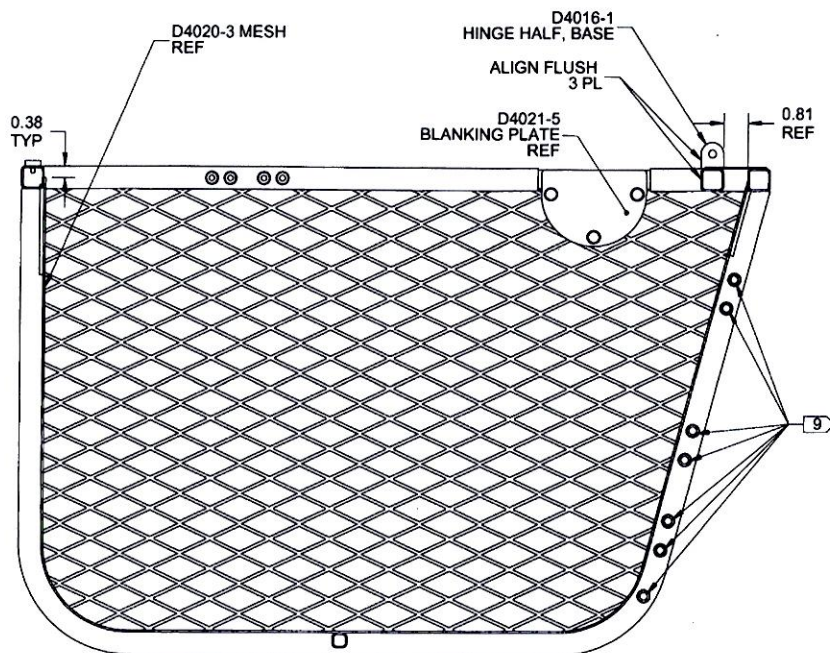
RELEASED
2013-08-16



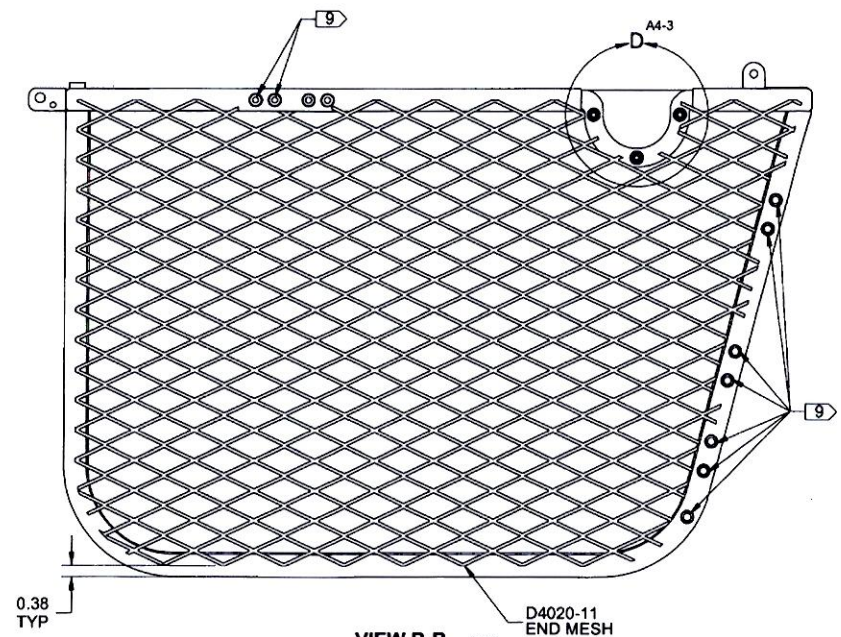
D4017-041 SHORT BASKET BASE ASSY (350)
(MESH SHOWN LOCALLY FOR CLARITY)

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
DATE	13.07.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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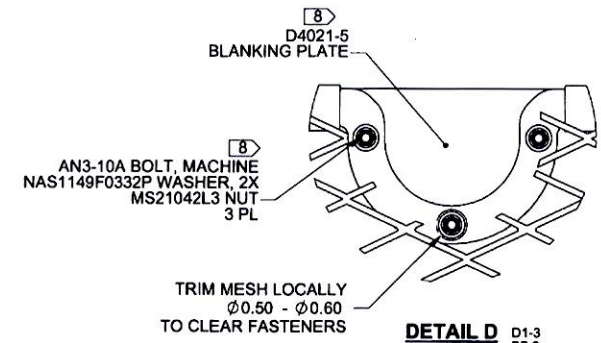
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SECTION A-A A5-2



VIEW B-B A2-2



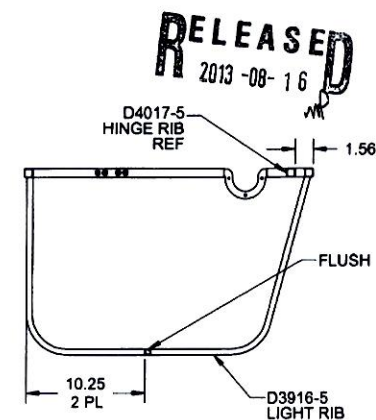
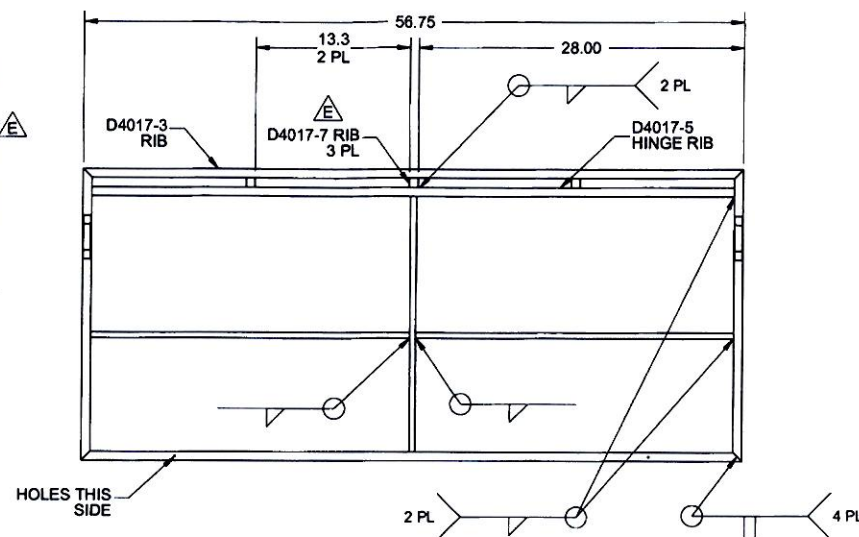
DETAIL D D1-3 B7-2

RELEASED
2013-08-16
MP

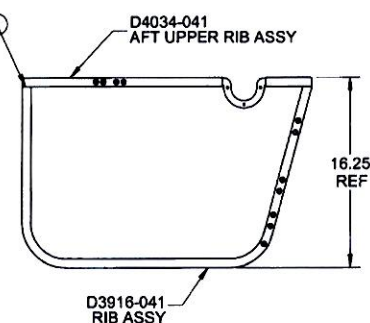
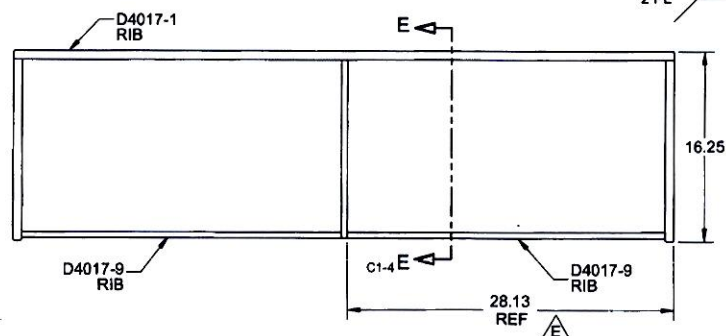
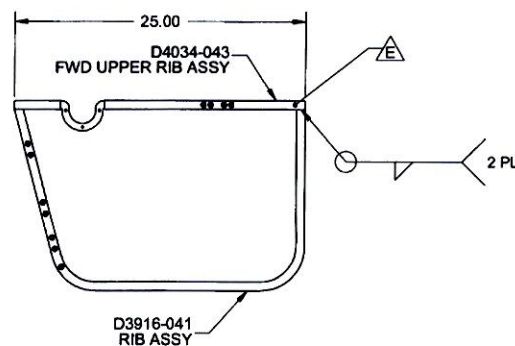
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DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
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8 7 6 5 4 3 2 1

ITEM	QTY -101	P/N	DESCRIPTION
	X	D4017-101	TUBULAR ASSY (350 SHORT BASKET)
1	1	D4017-1	RIB
2	1	D4017-3	RIB
3	1	D4017-5	HINGE RIB
4	3	D4017-7	RIB
5	2	D4017-9	RIB
6	1	D3916-5	LIGHT RIB
7	2	D3916-041	RIB ASSY
8	1	D4034-041	AFT UPPER RIB ASSY
9	1	D4034-043	FWD UPPER RIB ASSY



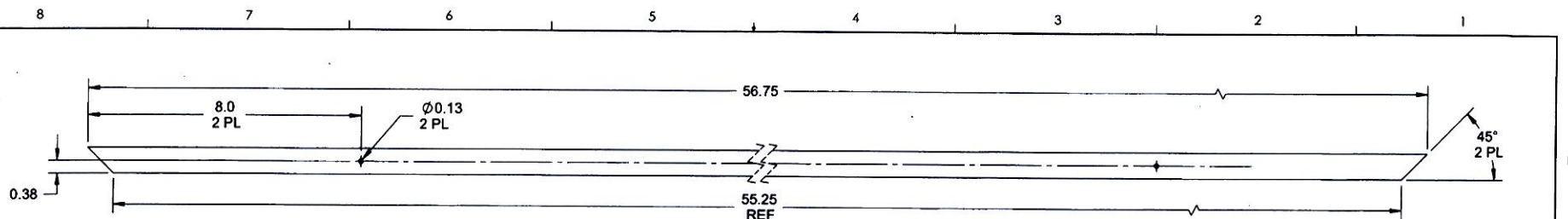
SECTION E-E A4-4



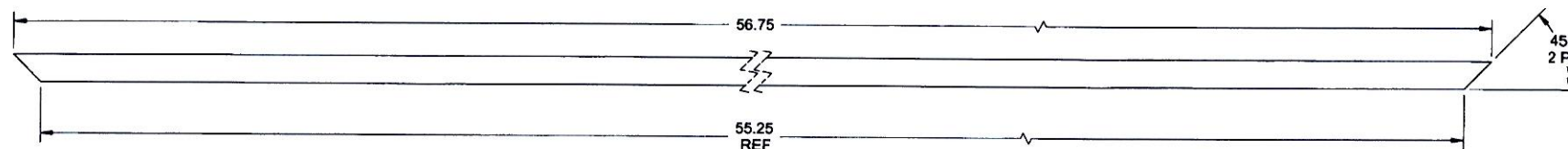
8 D4017-101 TUBULAR ASSY (350 SHORT BASKET)

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 15.38 lbs
 - 8) TOLERANCE FOR XX.XX DIMENSIONS ± 0.06 FOR D4017-101
 - 9) WELD PER DART QSI 004

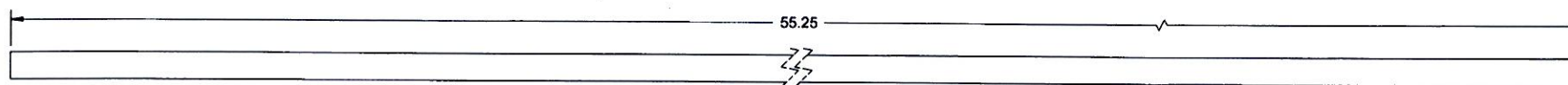
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4017	REV. E
MFG. APPR.	<i>[Signature]</i>		SHEET 4 OF 5
APPROVED	<i>[Signature]</i>	TITLE SHORT BASKET BASE ASSY (350)	SCALE NTS
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
DATE	13.07.18		



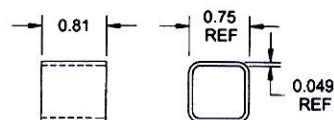
D4017-1 RIB



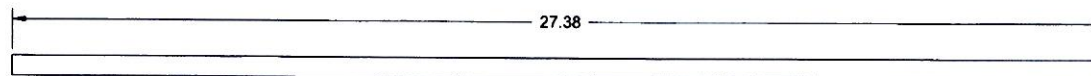
D4017-3 RIB



D4017-5 HINGE RIB



D4017-7 RIB



D4017-9 RIB

NOTES:

1) MATERIAL -1 THRU -7: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.750W.049

-9: AISI 304/316 SEAMLESS STAINLESS STEEL SQUARE TUBE, 0.50 X 0.50 X 0.049 WALL
PER ASTM A554 OR ASTM A269 MILL FINISH
REF DART SPEC. M304TS0.500W.049

- 2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: SEE ASSEMBLED WEIGHTS

RELEASED
2013-08-16

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4017	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SHORT BASKET BASE ASSY (350)	NTS
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